

### **REMARKS**

Reconsideration of the rejections set forth in the Office Action mailed June 1, 2010, is respectfully requested. Claims 53-82 have been cancelled without prejudice to their prosecution in another application. Claims 49 and 83 have been amended. Claim 49 was amended to include the limitation of dependent claim 82. No new matter was added with these amendments. Claims 49-52 and 83 are currently pending.

#### Art Rejections

Claims 49-52 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by WO 01/24824. Claims 49-52 and 83 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Roy et al., WO 01/24824 in view of Gollnick et al., March 2003. Claims 49-52 and 82 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Roy et al., WO 01/24824 in view of Lambert et al., 2001, J IMMUNOTHERAPY 24(3): 232-36.

Claims 49 has been amended to require that the immunologic vaccine comprise “*as an active component dead cell material derived from PDT-treatment of autologous autoreactive peripheral blood cells, or fragments thereof, or a supernatant thereof, and antigen presenting cells that have not been PDT-treated, wherein the autologous autoreactive peripheral blood cells are treated with a photoactivatable compound ....*”

Roy et al. does not describe a mixture of PDT-treated autologous autoreactive peripheral blood cells and antigen presenting cells. Gollnick also does not mention antigen presenting cells. The Examiner has taken the position that Lambert et al. teaches that dendritic cells loaded with apoptotic or lysed cells induce a more potent immune response than the cells or antigens alone.

Therefore, it would have been obvious to include a non-PDT treated dendritic cell in the immunologic vaccine as taught by Roy et al. WO 01/24824.

In contrast to the Examiner's statements, Applicants respectfully assert that Roy et al. in fact teaches away from adding antigen presenting cells to the immunologic vaccine. Roy et al. describes "the use of photoactivatable derivatives for the photodynamic treatment for the selective destruction and/or inactivation of immunologically reactive cells." (Abstract) There is no mention of a vaccine. Furthermore, Roy et al. only mentions dendritic cells in the context of using PDT and TH9402 to eliminate them. ("Therefore, PDT with TH9402 presents a therapeutic profile favorable to the elimination of immune cells, including activated T cells, B cells and potentially other cells (such as dendritic cells) that could be involved in immune disorders." (page 17, lines 20-24)) Thus, Roy et al. actually *teaches away* from the incorporation of antigen-presenting cells and would not be combined with any description in Lambert et al. regarding dendritic cells. (*See In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994) "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.")

Favorable action on the merits of the claims is therefore earnestly solicited. If any issues remain, please contact Applicant's undersigned representative at (949) 760-9600. The

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Commissioner is hereby authorized to charge any additional fees that may be required to Deposit  
Account No. 50-2862.

Respectfully submitted,  
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